Translation

PATENT COOPERATION TREATY

PCT/JP2003/014700

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference S03P1464	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP2003/014700	International filing date (*day/month/year*) 19 November 2003 (19.11.2003)	Priority date (*day/month/year*) 25 December 2002 (25.12.2002)
International Patent Classification (IPC) or national classification and IPC G11B 19/00, 20/10, H04N 5/85		
Applicant SONY CORPORATION		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 9 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 24 March 2004 (24.03.2004)	Date of completion of this report 14 July 2004 (14.07.2004)
Name and mailing address of the IPEA/JP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

ernational application No.
PCT/JP2003/014700

I. Basis of the report

1. With regard to the **elements** of the international application:*

☐ the international application as originally filed

☒ the description:

pages 4-14, 16, as originally filed
pages 1,2,3,3/1,15,17,18, filed with the demand
pages _____, filed with the letter of _____

☒ the claims:

pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages 1-5, filed with the demand
pages _____, filed with the letter of _____

☒ the drawings:

pages 1-12, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the sequence listing part of the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.*

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International application No.
PCT/JP03/14700

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	15	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-5	NO
Industrial applicability (IA)	Claims	1-5	YES
	Claims		NO

2. Citations and explanations

Documents cited in the ISR:
Document 1: JP, 6-243578, A
Document 2: JP, 11-162087, A
Document 3: JP, 11-162101, A
Document 4: JP, 4-205963, A
Document 5: JP, 7-220370, A
Document 6: JP, 8-255409, A
Document 7: JP, 8-287583, A
Document 8: JP, 10-222918, A

Documents that should be additionally cited due to the correction
Document 9: JP, 5-89469, A (Pioneer Electronic Corp.), 9 April, 1993 (09.04.93)
Document 10: Perfect Guide to Windows Me, (Tetsuya Hara, Nobuo Niwa, Masakazu Honda, Editing Dept. of Monthly ASCII), Separate Volume (Special Appendix) of Monthly ASCII of October 2000, ASCII Corp., Tokyo, Japan, 1 October, 2000 (01.10.00), Vol. 24, No. 10, pages 97-102

Opinion on the inventive step involved in all the claims:
Documents 1-8 cited in the ISR disclose a technology of intermittent access to a disk wherein the power-saving state of the disk device is set according to the idle time that depends upon the frequency of access. Accordingly, such technology was well known in the relevant field prior to the filing of the present application.

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of : V

Regarding the transfer rate, documents 2-8 do not particularly disclose it; however, document 1, showing a mini disk (MD) well known as a disk device with an intermittent recording/reading system, describes in paragraph [0011] that "between the memory circuit and an optical magnetic disk, audio data is input/output at a data transfer rate of 1.4 Mbps, while between the memory circuit and the sound compression/decompression circuit, audio data is input/output at a data transfer rate of 0.3 Mbps," but does not contain any description to relate the quoted description with the cited parts of the said document ("particularly, paragraph 0075" in the ISR).

Added document 9, however, which relates to the same mini disk (MD) device with power-saving control as document 1, describes that:

"Fig. 5 explains 'idle time' in a MD recording/reproducing device.... As shown in Fig. 5, every predetermined quantity of data is read, stored in DRAM, etc., temporarily and decoded in a time longer than the time taken to read it. This is...because data has been compressed to about 1/5. Accordingly, the optical pickup and so on to read data has "idle time" when the reading operation is not necessary, except the time when data is being read. In other words, the difference between the data decoding time and the data reading time is "idle time" (paragraph [0019]).

The invention of document 9 relates to "power-saving operation during the idle time" taking advantage of the said "idle time" to extend the life of the power source, and the means of such operation is common to those of documents 1-8 and is well known.

As for the feature wherein the compression system and transfer rate for images to be recorded in a disk can be selected from among various systems/rates, prior to the filing of the present application, additional document 10, for example, which is an explanation of "Windows Movie Maker" attached to "Microsoft Windows Millennium Edition (Me)" (registered trademark), a typical computer operating system prior to the said filing, describes that "the compression bit rate is 28.8-768 kbps" (see page 97, Table 6-6, Screen 6-35) and that any bit rate can be selected from among a plurality of bit rates. Such a mode is well known in the field of recording and editing of motion images.

Considering the foregoing and paragraph [0019] of document 9, in view of the fact that such change of bit rate of images as in document 10 has an effect on the value "1/5" in "data is compressed to 1/5" as in document 9, and the fact that a higher bit rate means a larger quantity of data per unit time, it is obvious that the said effect makes the denominator smaller or the numerator larger in "1/5" in document 9.

Accordingly, when data with different bit rates is recorded and reproduced on the same disk, it is obvious that the "idle time" in document 9 is shorter as the bit rate is higher, and so where there occur such time differences, a person skilled in the art in the relevant field could have easily adopted the well-known mode of changing power-saving control according to the difference in "idle time" described in documents 1-8, prior to the filing of the present application, in view of the characteristics of data in document 10. So, the subject matters of all the claims of the present application do not appear to involve an inventive step.